Amendments to the Specification:

Please amend the paragraph beginning on page 5, at line 10 as shown below:

As better, shown in Figure 2, ECM 28 of controller 25 may communicate with various vehicle output devices such as status indicators/lights 96, analog displays [[98]] 97, digital displays 100, and various analog/digital gauges 102. In one embodiment of the present invention, ECM 28 utilizes an industry standard data link 104 to broadcast various status and/or control messages which may include engine speed, accelerator pedal position, vehicle speed, and the like. Preferably, data link 104 conforms to SAE J1939 and SAE J1587 to provide any of the various service, diagnostic, and control information to other engine systems, subsystems, and connected devices such as display 100. Preferably, ECM 28 includes control logic to determine and represents current engine and ambient operating conditions to detect engine operating conditions, such as EGR condensation conditions, and to control the engine accordingly to avoid EGR condensation. As described in greater detail below, ECM 28 preferably monitors engine speed and load, ambient temperature, EGR flow (%) and temperature, turbo boost and/or manifold pressure, and air/fuel ratio to determine a threshold for activation of condensation avoidance strategies, which may include selectively diverting at least a portion of the EGR flow around the EGR cooler to raise the intake manifold temperature and reduce or eliminate condensation of the recirculated exhaust gas. Similarly, at least a portion of the charge air may be selectively diverted around the charge air cooler.

Please amend the paragraph beginning on page 9, at line 23 as shown below:

In the representative embodiment of the present invention illustrated in Figure 3, current ambient conditions are determined or monitored as represented by block 80. Ambient conditions may be determined using appropriate sensors or estimated, inferred or assumed depending upon the particular application. Preferably, block [[80]] 81 includes at least a determination of the ambient air temperature as represented by block 82. At least one of five operating conditions, preferably, from the group consisting of ambient temperature, intake manifold temperature, EGR mass rate, engine speed and intake manifold, will be sensed, although other operating conditions may also be monitored.

Please amend the paragraph beginning on page 10, at line 1 as shown below:

The relative humidity may also be determined as represented by block [[84]] 85 using a sensor as represented by block 86 or set to a predetermined value as represented by block [[88]] 87. For example, rather than requiring a humidity sensor, the present invention may use a fixed high value for the relative humidity, such as 100%, which represents a very conservative calibration. This provides the greatest protection or margin of error for operating without formation of EGR condensation in the intake manifold. Of course, lower stored humidity values may be used in determining whether to bypass the EGR cooler and/or charge air cooler, although lower values are more likely to result in some condensation under certain ambient and operating conditions.

Please amend the paragraph beginning on page 10, at line 11 as shown below:

Current engine operating conditions are monitored or determined as represented by block 90. This may include sensing of the intake manifold temperature 92, engine speed and load 94, intake manifold pressure 96, and EGR flow (%) 98. Alternatively, the air/fuel ratio or boost may be otherwise determined, but the combined inputs of intake manifold pressure (IMP) and EGR flow (%) provide an expedient substitute for those parameters. The EGR flow 98 and air/fuel ratio 120 may be determined based on scheduled values or based on actual sensed values depending upon the particular application. The current ambient and operating conditions determined in blocks [[80]] 81 and 90, respectively, are then used to determine whether conditions are favorable for EGR condensation in the intake manifold as represented by block 122.

Please amend the paragraph beginning on page 12, at line 14 as shown below:

The combination of values obtained by sensing and assumptions are then employed in the processing of data in the control 26 through algorithms after the IMT_Critical equation determines an IMT_Critical value. As shown at [[128]] 126, the intake manifold temperature is compared with the IMT_Critical prediction. If the IMT measured is greater

than the intake manifold temperature critical as predicted by calculation, the control commands turn on the exhaust gas recirculation as shown at [[130]] 128. If not, the engine may be maintained in boost mode as shown at 128. Other operational changes may be generated by the control 28 in response to the comparison.

Amendments to the Drawings:

The attached sheets of drawings includes changes to Figures 1, 2, and 3. These sheets, which includes Figures 1, 2, and 3, replace the original sheets including Figures 1, 2, and 3.

Attachment: Replacement Sheet